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(ORF: 258 - 1976)

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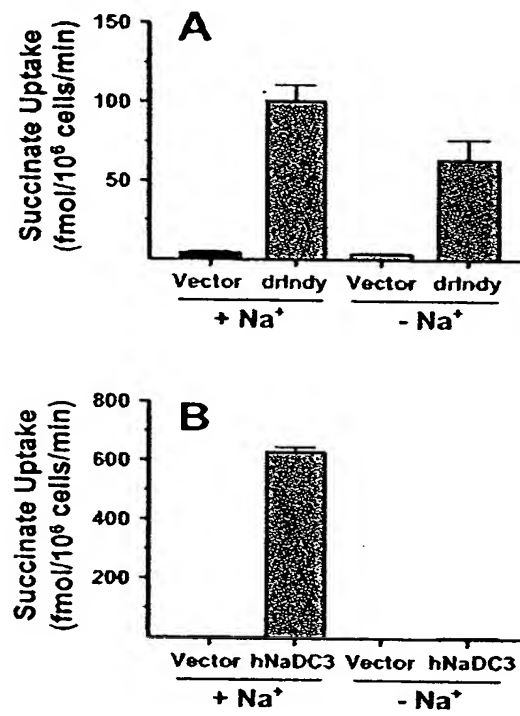
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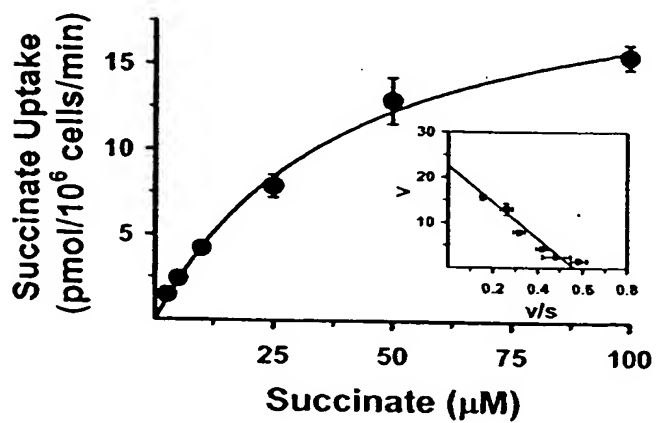
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Figure 2



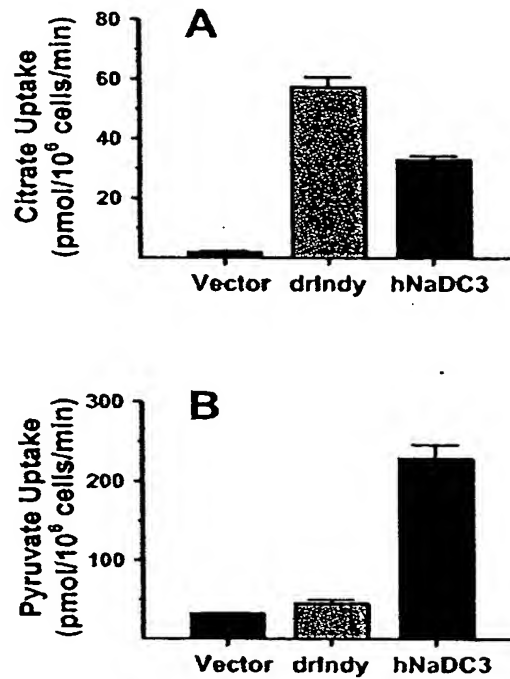
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Figure 3



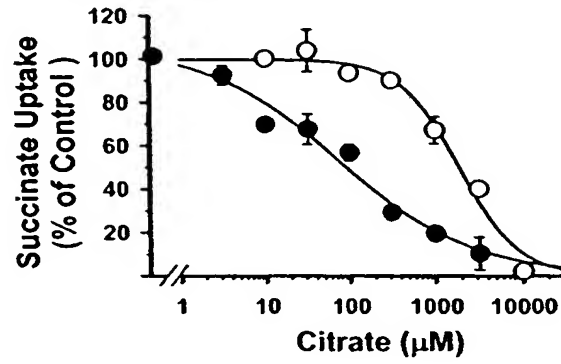
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Figure 4



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Figure 5



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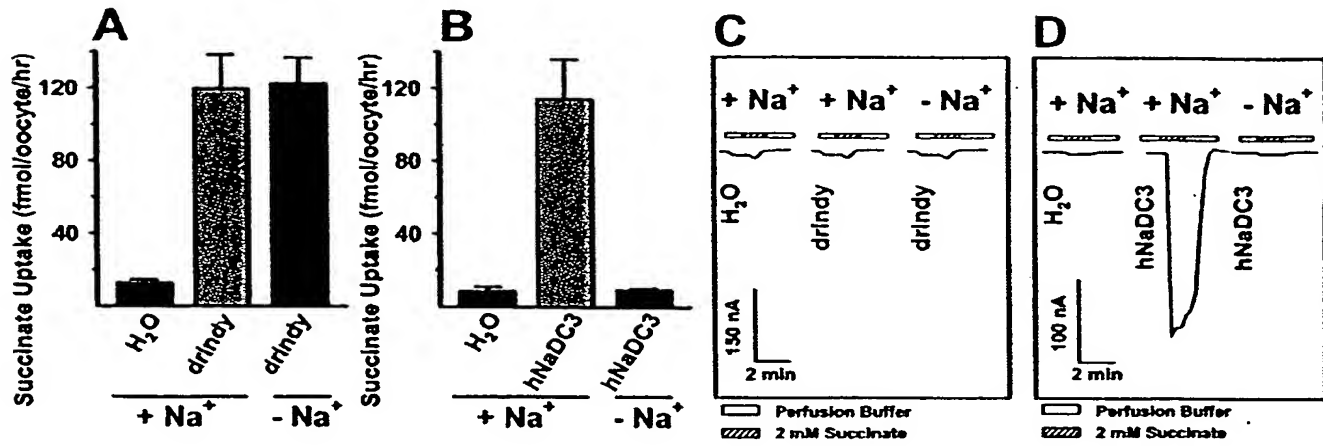


Figure 6

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Figure 7

Rat INDY seq.
(3191 nt + 63 nt polyA)

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SEQ ID NO:3

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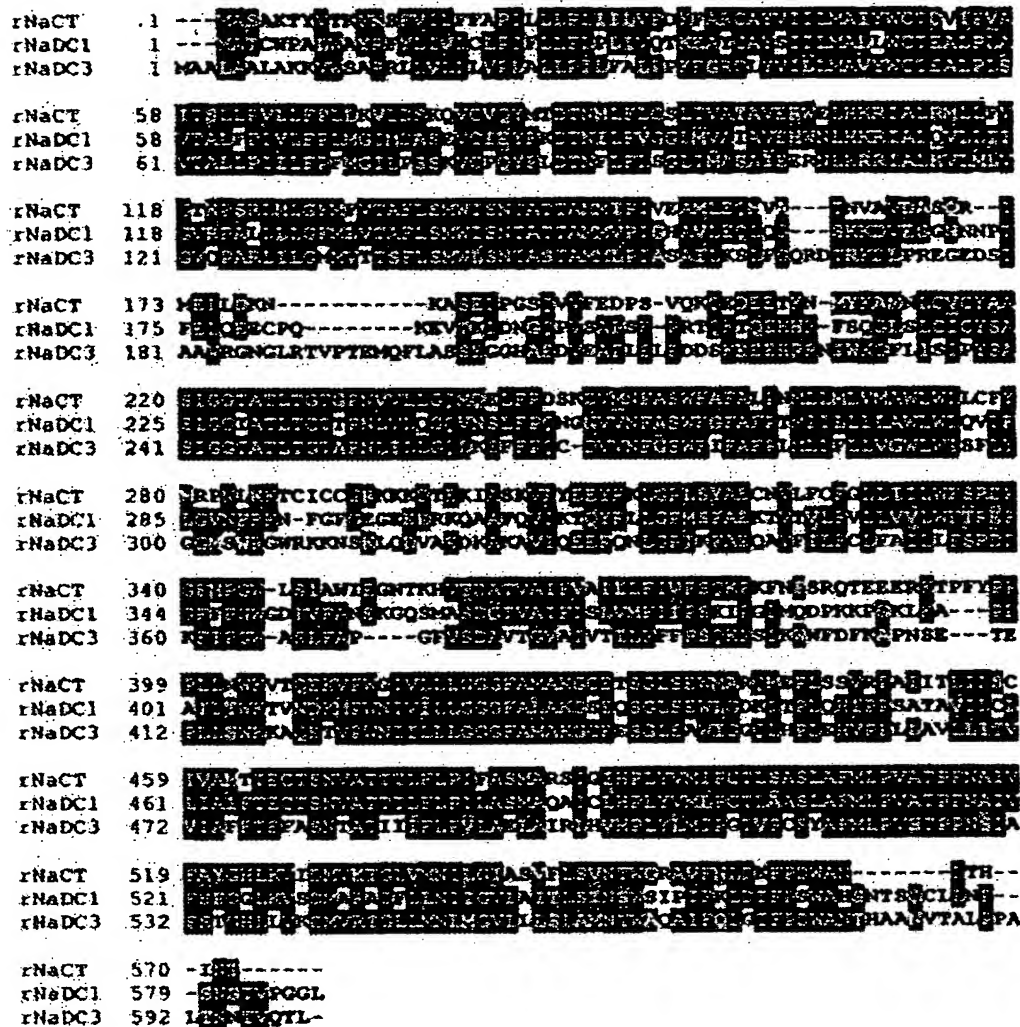
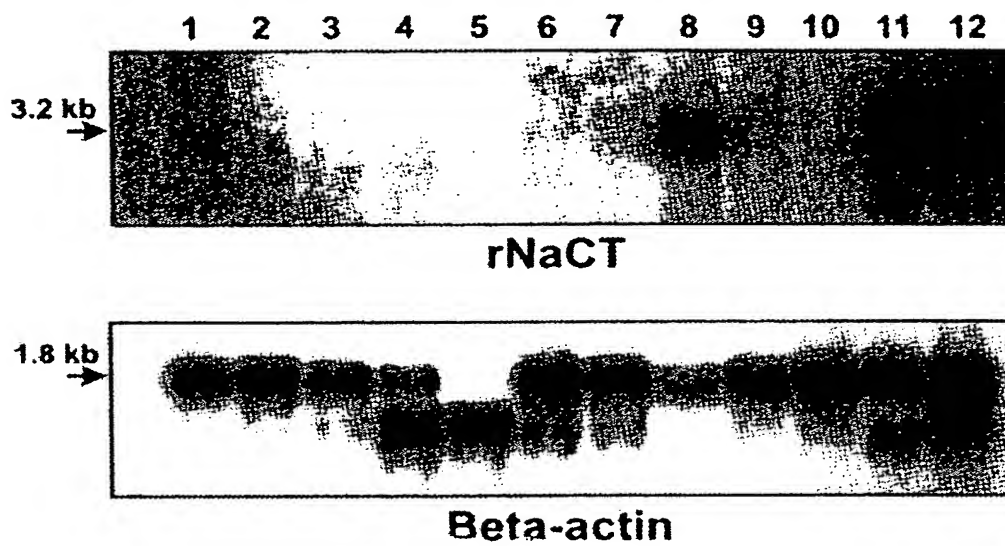


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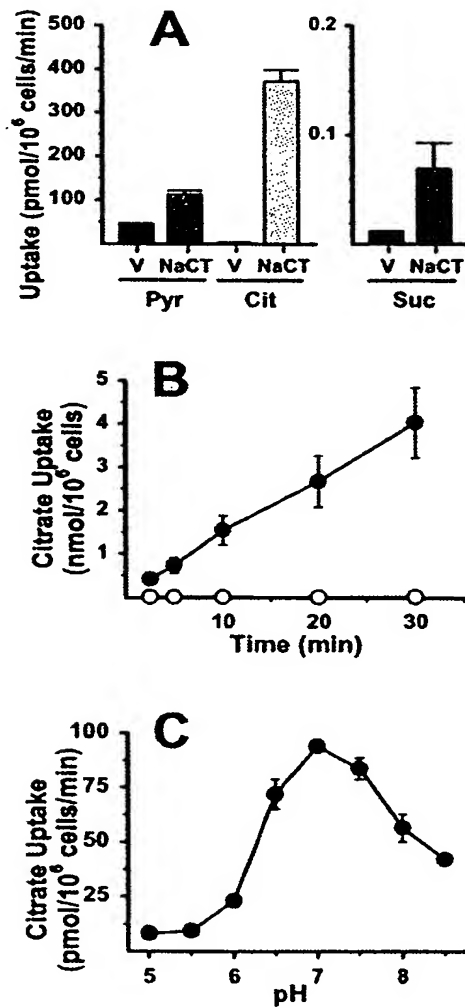
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Figure 9



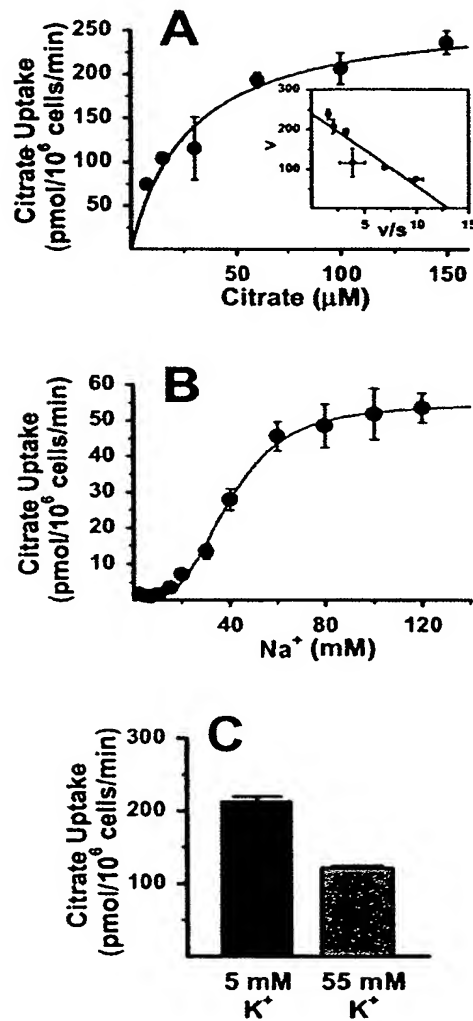
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Figure 10



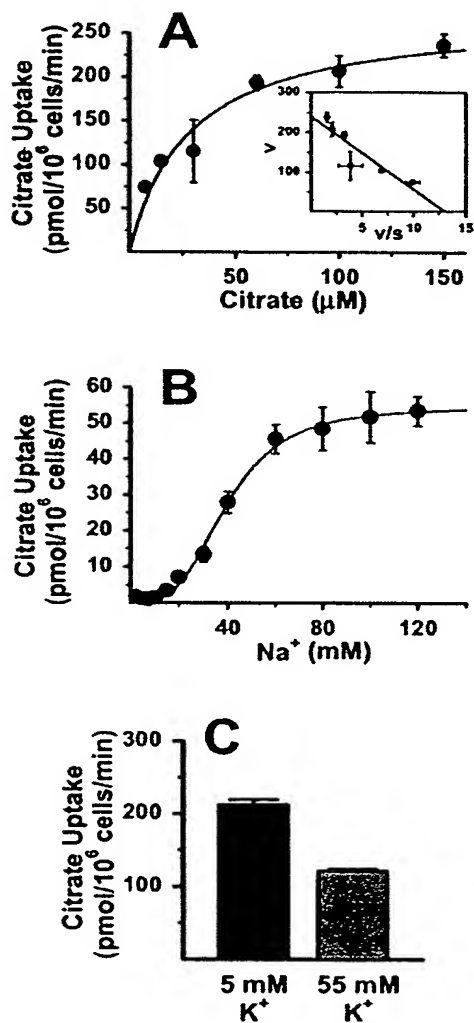
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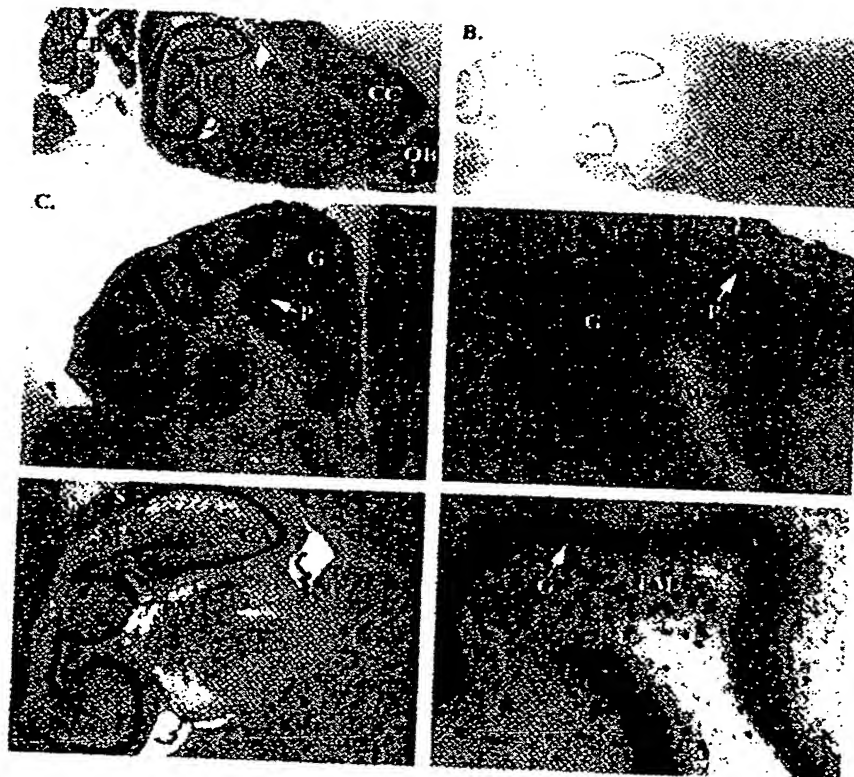
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Figure 12



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Figure 13



SEQ ID No:6

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| rat | 1 | MAAAYVATKSKSSVILFVTLLDLLPLVLMEAKFRCAYVILLALYNCTDVIPLAVTS |
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| rat | 61 | LMVLLSPFLQILDSKQVCVQVYQDTRMLSLGGLIVAVVERKQHKRIALRPLQVYQK |
| human | 121 | PARMLGKGVYALSSNHSNTATTACWVEREILQKBAASNAIDSG---DELVDKQK |
| rat | 121 | PSRLMLGKGVYALSSNHSNTATTACWVEREILQKBAASNAIDSG---DELVDKQK |
| human | 178 | ACELPSSQVFEQENLCOEDDEKRRQCCVYTCICVYASIGGTATLTGCGPNTWLLGN |
| rat | 181 | ACELPSSQVFEQSVYQKDEETIKVYTCVYTCVYASIGGTATLTGCGPNTWLLGN |
| human | 238 | NELFPDSKOLVNFASNFASAFKMLVHLPAWNLQPVVIRPSPKSNWGGLESKE-NET |
| rat | 241 | QELFPDSKQVNFASNFASAFKMLVHLPAWNLQPVVIRPSPKSNWGGLESKE-NET |
| human | 297 | AAIKVLEEBVRKLGPLSYAEITVLCFPLVILWSSRDPPGFMFGNLCVAVVEGERTVSC |
| rat | 301 | IAIKVLEEBVRKLGPLSYAEITVLCFPLVILWSSRDPPGFMFGNLSIAWIEGRTVSC |
| human | 357 | ATVAIFVATLPLFVPSQKPKFNSRQTEEBERKTFVPPPLDQKVTCQKVPNGIVLLGG |
| rat | 361 | ATVAIFVATLPLFVPSQKPKFNSRQTEEBERKTFVPPPLDQKVTCQKVPNGIVLLGG |
| human | 417 | GFALAKGSDAGSLVWIKKQNEPLHAPPAATQQLSLVAVPTQCTSNVATTTLPLPIS |
| rat | 421 | GFALAKGCEISGLSRYARQNEPLSSPPAIQQLSLVAVPTQCTSNVATTTLPLPIS |
| human | 477 | ASKRSIGLPLVIMLPCTLSASAFMLPVATPPNAIVEVCHLKVADQVKTGVINCHIS |
| rat | 481 | ASKRSIGLPLVIMLPCTLSASAFMLPVATPPNAIVEVCHLKVADQVKTGVINCHIS |
| human | 537 | LPQVSLAINTGRAISQDDHSPDWAIVTHIEK |
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Figure 15

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Figure 16

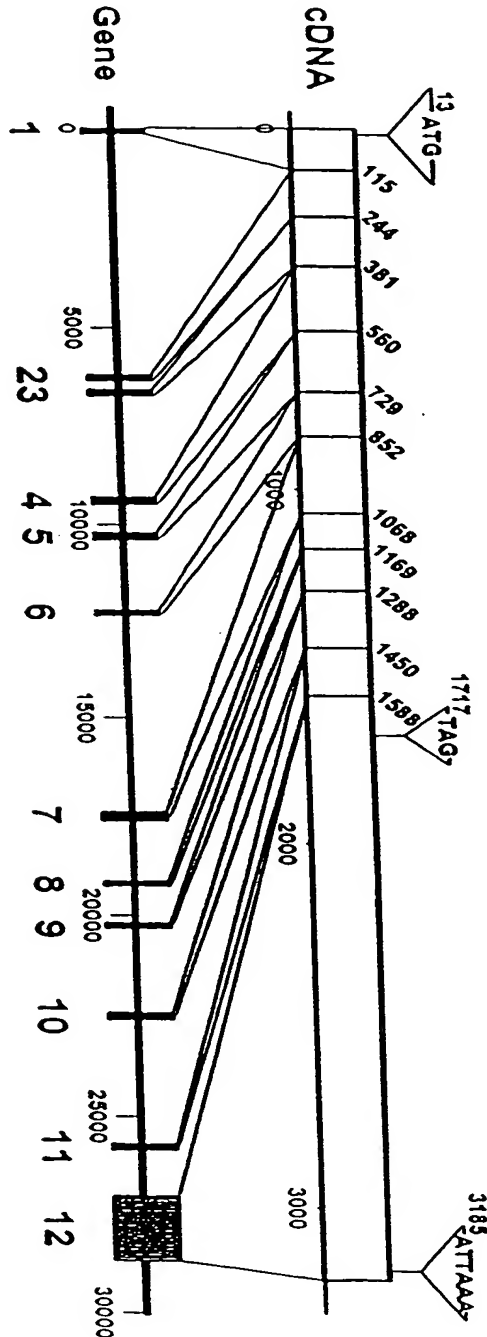


Figure 17

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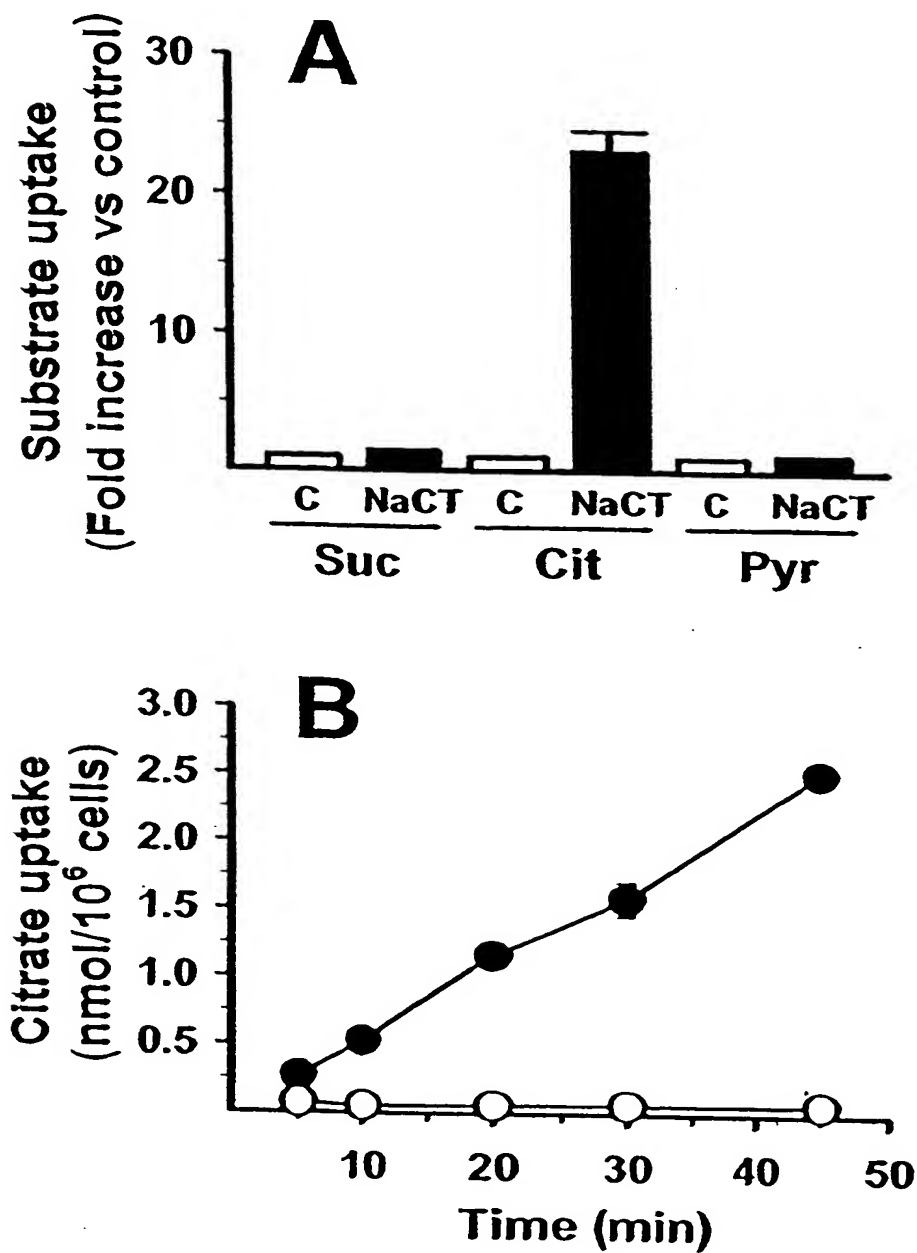
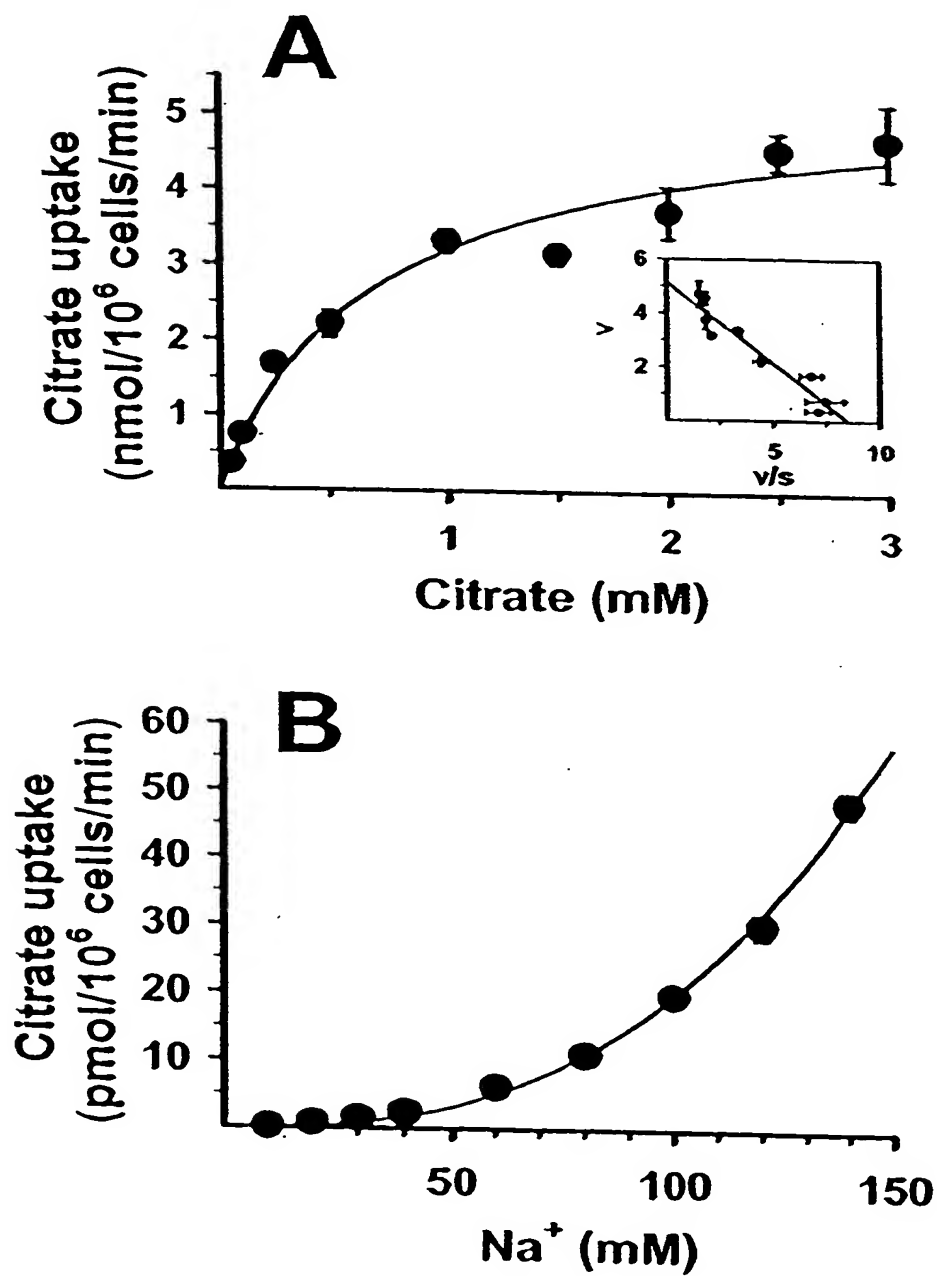


Figure 18

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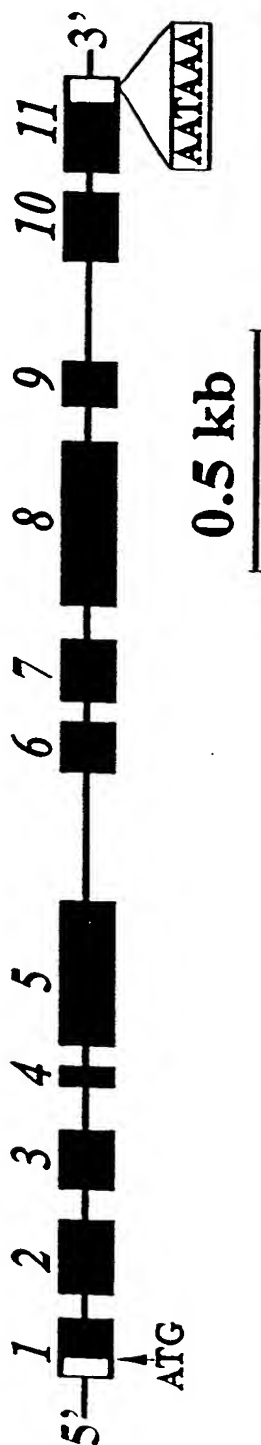
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1201 V W P K D P F D P I D P M A P I L K W T D N K S K F S W S C T L L
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1301 I G A G Y A I S E G V D K S G L S R L I S C G M K N I F V G M S S L
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Figure 20



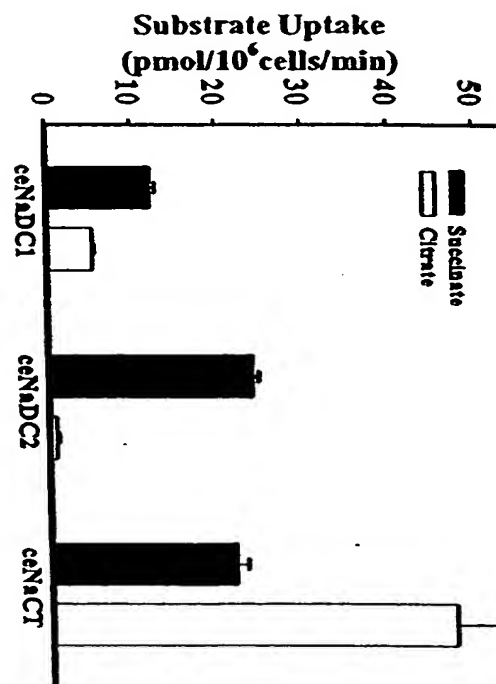
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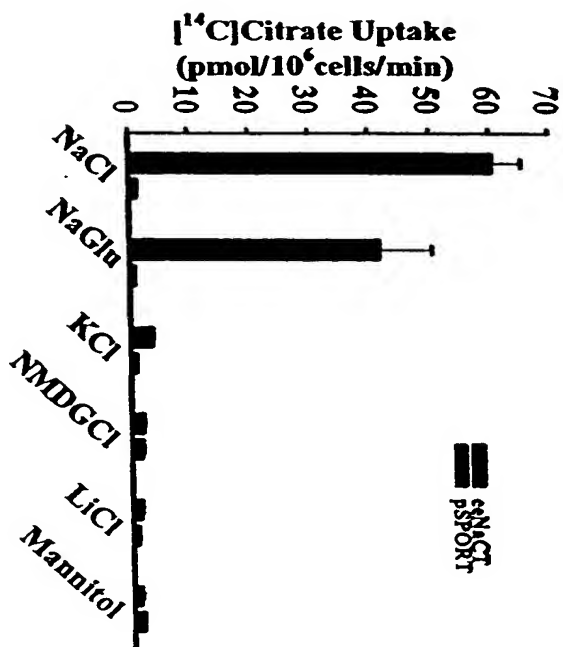
Figure 21

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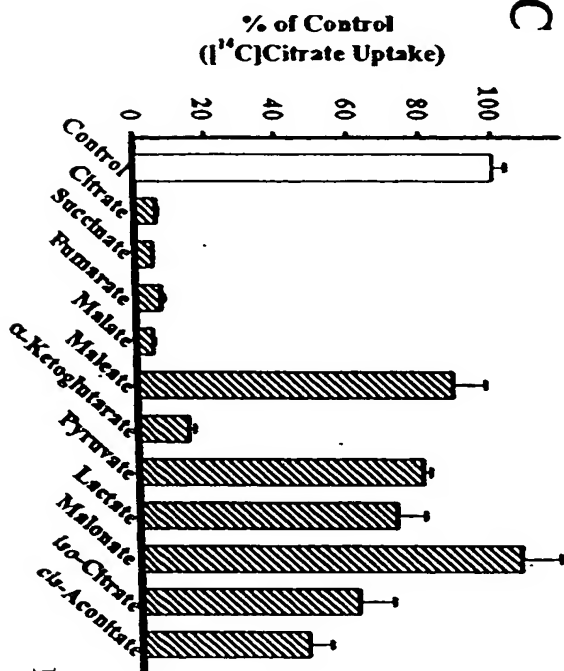
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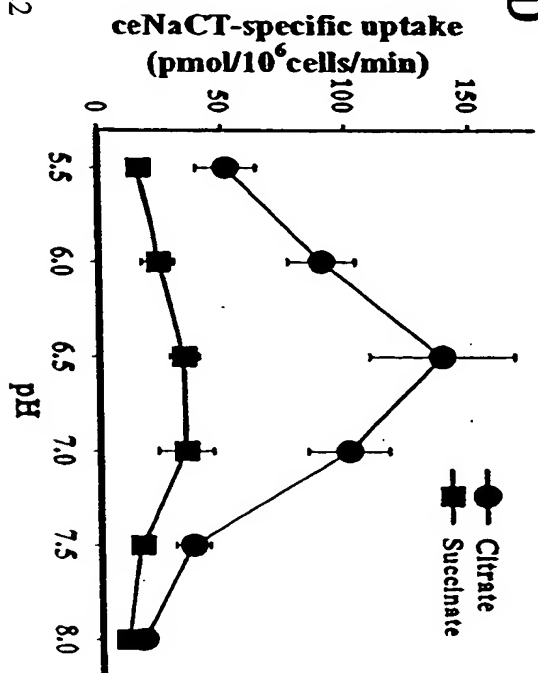
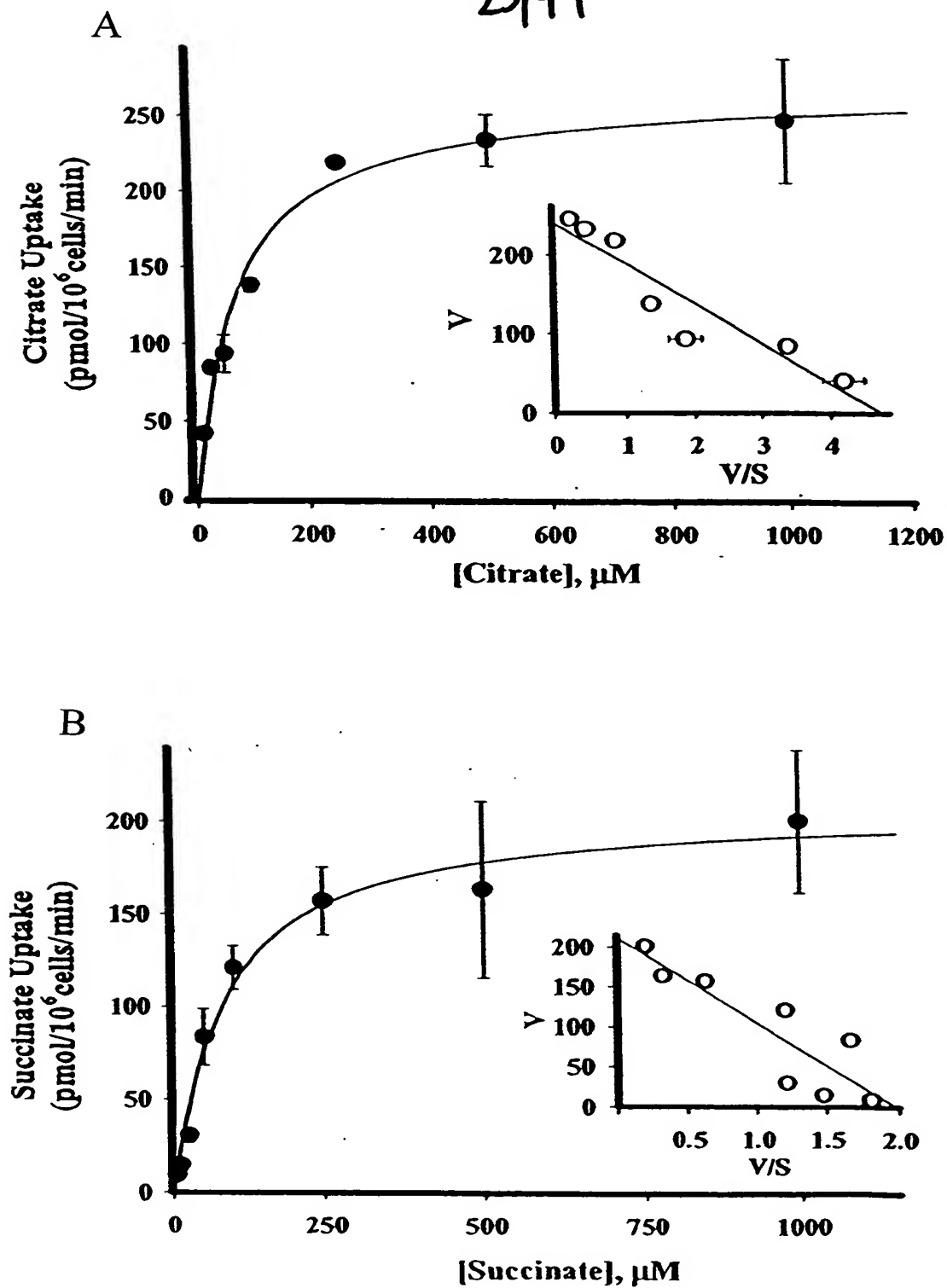


Figure 22

Figure 23



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Figure 24

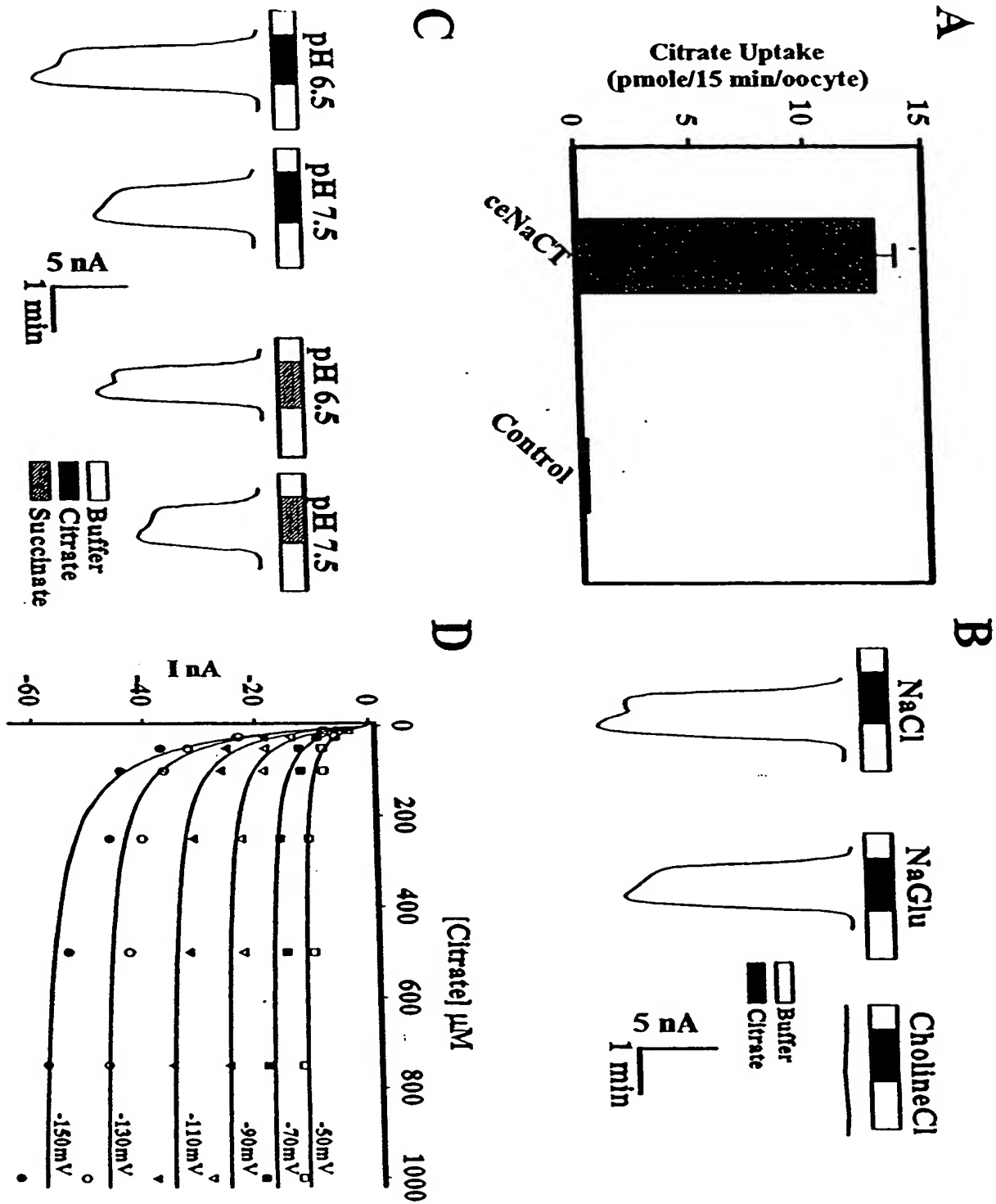
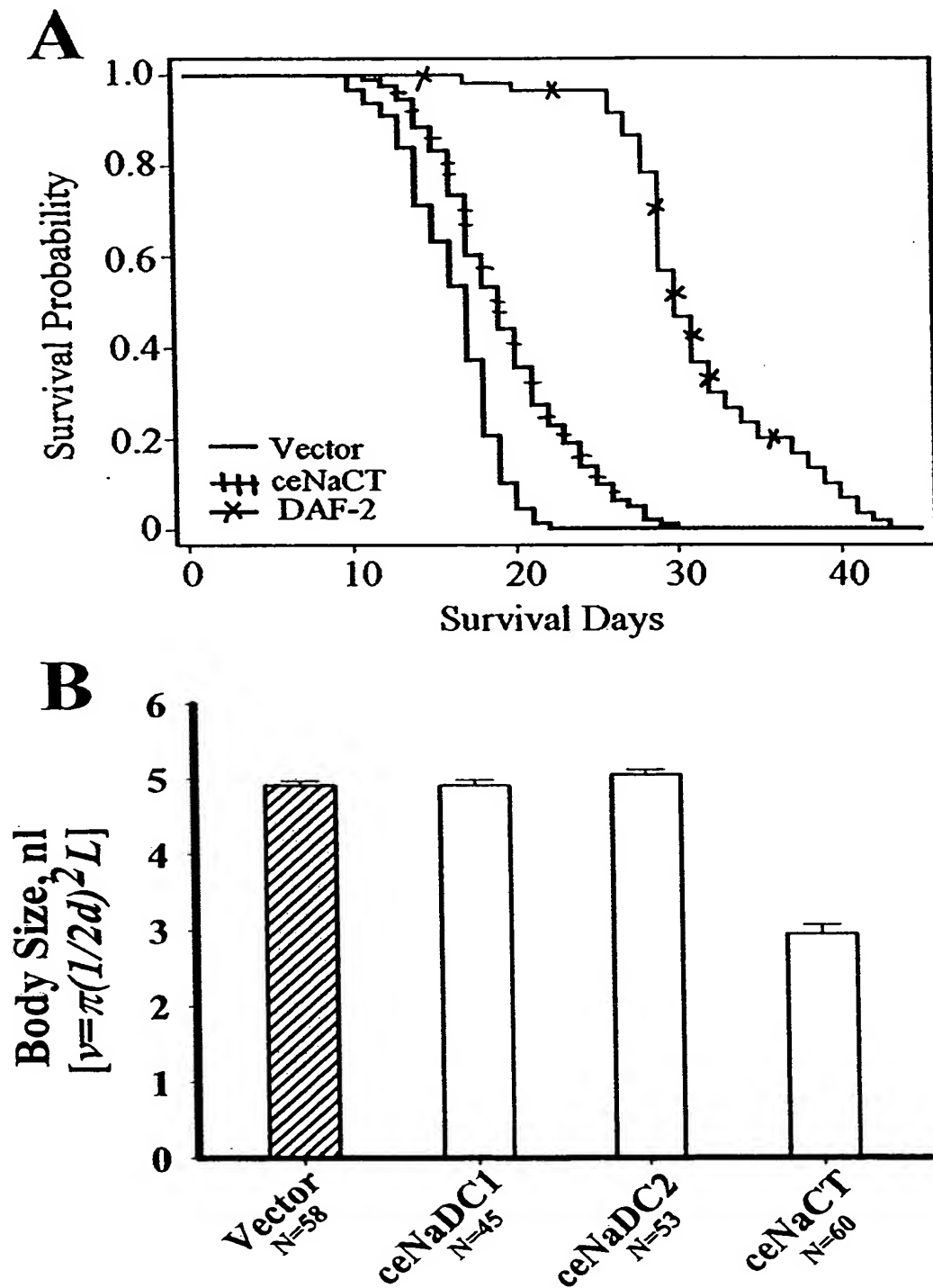


Figure 25

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Figure 26

RNAi; ceNaCT & pPD129; Nile Red (0.05 µg/ml) staining

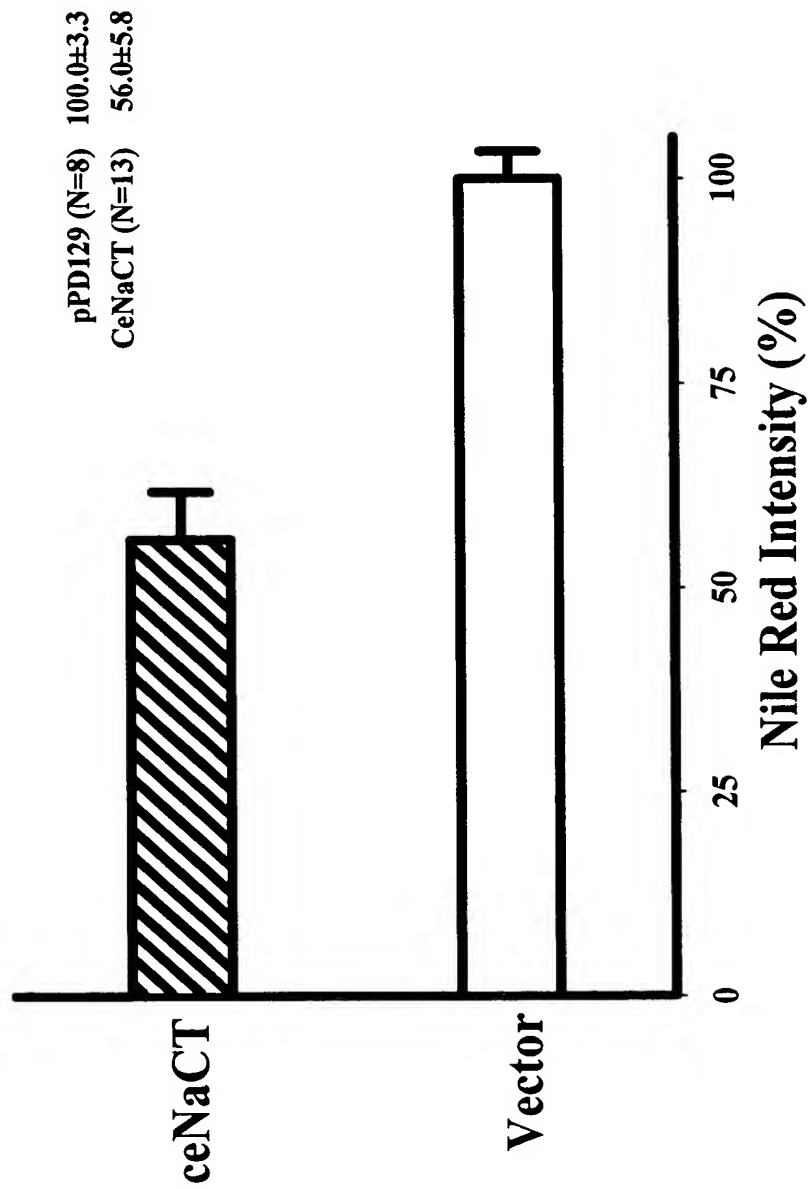


Figure 27

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SEQ ID NO: 9

Mouse NaCT sequence

cDNA sequence (16 nt + 1719 nt)

GTCTCCCTTTCACGCG
ATGGATTCCGCGAAGACTTGTGTGACCAAGTTCAAGTCCTTTGCGATTTTGCTCTTCACCCCGATCCT
GATGCTTCCACTCGTCATTCTGATACCTGACAAGTTTGCCAGGTGTGCCTATGTTATAGTCATTATGG
CTGTCTACTGGTGACAGATGTCATCCAGTGGCTGTGTACCTCCCTCCT GCCTGTCTTACTCTTCCCA
CTTTTGAAGGTTCTGGACTCCAAGCAGGTATGTATCCAATACATGAAGGACACCAACATGCTGTTCTC
GGCAGTCTCATTGTGGCTGTGGCTGTGGAAACGCTGGAAACTTCATAAGAGGGTTGCCCTGAGAATGC
TGCTCTTTGTGGGGACCAAGCCCTCACGGCTGATGCTGGGCTTTATGTTTGTACCGGCTTCCTGTCC
ATGTGGATCAGCAATACTGCCGCCACAGCCATGATGATACCCATTGTGGAGGCCATGCTGCAGCAAT
GATAGCCGCCAATACAGCTGTGGAGGCCAGCCTGGGGACACTGGAGCTGCTGGACAAGAACAAGACCA
GCGAGTTGCCAGGAAGCCAGGTGGTATTTGAAGACCCCAATGTGCAGGAGCAGGAAGACGAAGAAACA
AAGAATATGTACAAGGCTATGCACCTATGTGTTTGTCTATTACGCCAGCATTGCGGGTACAGCCACCTT
GACCGGACGGGACCCAAACGTGGTGTCTCTGGGCCAGATGCAGGAATTGTTTCCCTGACAGTAAAGATG
TCCGTGAACCTATGCATCTTGGTTTGGATTTCCTTCCCCAACATGGTGATGATGCTGGTGTGGCCTGG
CTGTGGCTCCAGTGCTTGTACATGAGACACAATTTAAAAAAAACCTTGCATCTGCTGTGGGAGAAGAA
GAGGGACACCGAGAAGATTGCCCTACAAAGTGCTGAACGAGGAGTACCAGAAGCTGGGGTCTCTGAGCT
ACCCTGAATGCAACGTGCTCTTTTGTCTTACCCTACTTGTCTCTGTGGTTCTCCCGAGACCCCGGC
TTCATGCCCTGGCTGGCTGTCTTCCCTGGGTGCGAGGGAAACACCGTTTCATATCACAGATGCCACAGT
GGCCATCTTTGTGGCCATTTTGTCTTTTCATCATACCTTCACAAAAGCCCCAAGTTCAACTTCAGCAGCC
AGACTGAGGAAGAAAGGAAAACCTCCGTTCTACCCCCCAGCACTGCTGGATTGG AAAGTCCGCCAAGAG
AAAGTGCCCTGGGACATCGTGCTGCTCTGGGGGGAGGGTTTGTCTATGGCAAAAGGATGTGAGACGTC
AGGGCTCTCGAAGTGGATGGCAGCACAGATGGAACCTTGAGATTAGTGAACCTGCTGTCTTACCTT
TGATCTTGTCTGTCTTGTGTGCAATGACCACAGAGTGCACAAGTAACGTGGCCACTACCACCTGTTC
CTGCCTATCTTTGCCTCCATGGCTCGTTCCATTGGTA TCCATCCTCTGTATGTCATGATTCCCTGTAC
CATGAGTGCTTCACTTGCCTTCATGTTGCCTGTGGCCACCCACCGAATGCCATCGTGTTCCTTACG
GACACCTCAGAGTTGTTGACATGATGAAAAACAGGATTGATAATGAACCTCGTTGGAATCCTATCTGTG
TTTCIGTCAGTCAACACCTGGGGTCCGGCTATGTTTAACTTGGATAACTTCCCCGACTGGGCAAATTC
AACAAAGTGTTAACACTTAG

Protein sequence (572 nt)

SEQ ID NO: 10

MDSAKTCVTKFKSPAILLFTPIILMLPLVILIPDKFARCAVYVIMAVYHCTDVIPIVAVTSLLPVLLFPLLKVLDSKQV
CIQYMKDNTNMLFLGSLIVAVAVERWKLHKRVALRMLLFVGTKPSRLMLGFMFVTAFPLSMWISNTAATAMMIPIVEAML
QQMIAANTAVEASLGTLLELDKNKTSRLPGSQVVFEDPNVQEQEDEETIONMYKAMHLCVCYSASIGGTATGTPNV
VLLGQMQLFPDSKDVLYASWFGFAPPNMVMMLVLAWLWLQCLYMRHNLKKTICCGEKKRDTEKIAYKVLNBEYQK
LGSLSYPECNVLFCTLLVILWFSRDPGFMPGWLSPAWVEGNTVHITDATVAIFVAILLFIIPSQPKFNPSSQTEEB
RKTPFPYPALLDWKVAQEKVPWDIVLLGGGFAMAKGCETSGLSKWMQAQMEPLRLVKPAVITLILSCLVAMTTECTS
NVATTTLFLPIFASMARSIGIHPLYVMIPTMSASLAFMLPVATPPNAIVFAYGHLRVVDMMKTGILMNFVGLSVFL
SVNTWGRAMFNLDNFPDWNSTSVNT

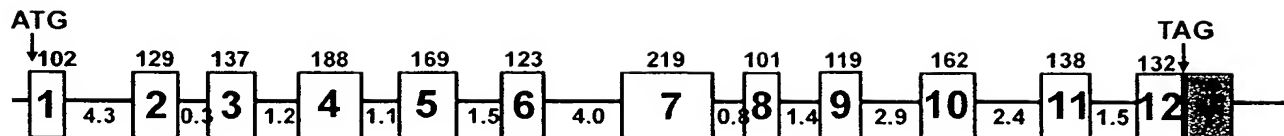
Figure 28

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| | | |
|-------|-----|--|
| mouse | 1 | MDSAKTQVTKFKSFALLFTPIILMLPLVILIPDKFARCAVYVIVIMAVYWCTDVIPVAVTS |
| rat | 1 | MASAKTYVTKFKSFVILFFAPILLPLIILVDPKFAVCAYVILMAIYWCTDVIPVAITS |
| human | 1 | MASATSYVSKFKSFVILEVTPLLLPLVILMPAKEVRCAYVILMAIYWCTEVIPLAVTS |
| mouse | 61 | LLPVLLFPLLKVLDISKQVCIOYMKDNTNMLFLGSLIVAVAVERWKLHKRVALRMLLFVGTK |
| rat | 61 | LLPVLLFPLLKVLDISKQVCVQYMDNTNMLFLGSLIVATAVERWELHKRIALRMLLFVGTK |
| human | 61 | LMPVLLFPLFQILDSRQVCVQYMKDNTNMLFLGCLIVAVAVERWNLHKRIALRTLLWVGAK |
| mouse | 121 | PSRLMLGFMFVTAFLSMWISNTAATAMMIPIVEAMLQOMIAANTAVEASLGTLELLDKNK |
| rat | 121 | PSRLMLGFMFVTAFLSMWISNTATTAMMIPIVEAMLEQMVATNVAVDASORTMELLDKNK |
| human | 121 | PARLMLGFMGVTAALLSMWISNTATTAMVPIVEAILQOMEATSAATEAG---LELVDKGK |
| mouse | 181 | TSELPGSQVVFEDPNVQEQEDEETKNMYKAMHLCVCYSASIGGTATLTGTGPNVVLGQM |
| rat | 181 | ASELPGSQVVFEDPSVQEQEDEETKNMYKAMNLCVCYAASIGGTATLTGTGPNVVLGQM |
| human | 178 | AKELPGSQVIFECPPLGQEQEDQERKRLCKAMTLCICYAASIGGTATLTGTGPNVVLGQM |
| mouse | 241 | QELFPDSKDVLYNASWFGFAFPNMVMLVLAWLWLQCLYMRHNLKKTICCCGKKRDEK |
| rat | 241 | QELFPDSKDVNFASWFAFAPNMLMLVMAWLWLCEYMRPNLKKTCICCGRKKKDEK |
| human | 238 | NELFPDSKDLVNFASWFAFAFPNMLVMLLFAWLWLQCFVYMRFNFKKSWCCGLESKK-NEK |
| mouse | 301 | IAYKVLNEEYQKLGSLSYPECNVLECFETLLVILWFSRDPGFMPGWLSFAWVEGNTVHITD |
| rat | 301 | IASKVLNEEYRKLGPLSYAECNVLECFGLLIILWFSRDPGFMPGWLSIAWIEGNTKHVTD |
| human | 297 | AALKVLQEEYRKLGPLSFAEINVLTCEFTLLVILWFSRDPGFMPGWLTVAWVEGETKYVSD |
| mouse | 361 | ATVAIFVAILLFIIPSQKPKFNFSQTEERKTPFYPPALLDWKVQEKVPWDIVLLLG |
| rat | 361 | ATVAIFVAILLFIIVPSQKPKFNFSQTEERKTPFYPPPLLQWKVTQEKVPWGIVLLLG |
| human | 357 | ATVAIFVAILLFIIVPSQKPKFNFSQTEERKTPFYPPPLLDWKVTQEKVPWGIVLLLG |
| mouse | 421 | GFAMAKGCETSGLSKWMARQMEPLRIIVKPAVITLILSCLVAMTTECTSNVATTTFLPIF |
| rat | 421 | GFAMAKGCETSGLSEWMARQMEPLSSVRPAITLILSCLVAMTTECTSNVATTTFLPIF |
| human | 417 | GFAIAKGEASGLSVWMGKQMEPLHAPPAITLILSILVAVETECTSNVATTTFLPIF |
| mouse | 481 | ASMARSIGIHPLYVMIPTCTMSASLAFMLPVATPPNAIVEFAYGHLRVVDMKGTGLIMNEVG |
| rat | 481 | ASMARSIGIHPLYVMIPTCTLSASLAFMLPVATPPNAIVEFAYGHLKVIDMVKTGIVMNIIG |
| human | 477 | ASMSRSIGLNPLYIMLPCTLSASLAFMLPVATPPNAIVEFYGHLKVADMVKTGIVMNIIG |
| mouse | 541 | ILSVFLSVNTWGRAMFNLDNFPDWANSTSVNT |
| rat | 541 | IASVFLSVNTWGRAVFNLDKFPDWANLTHINT |
| human | 537 | VFCVFLAVNTWGRAIFDLDFPDWANVTHIET |

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Figure 29

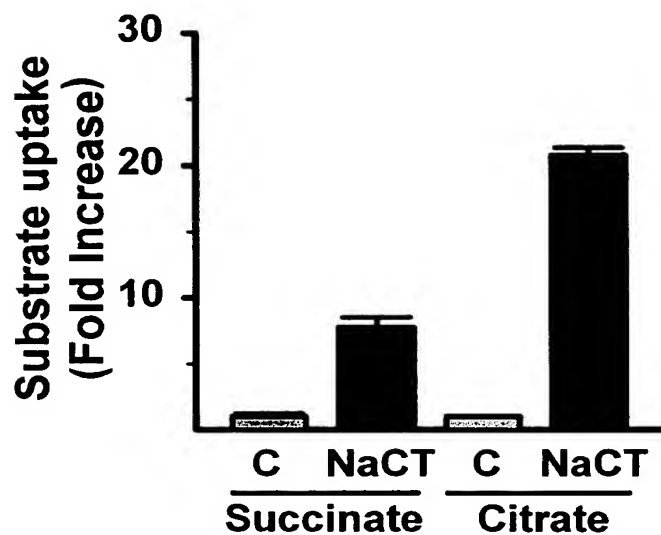
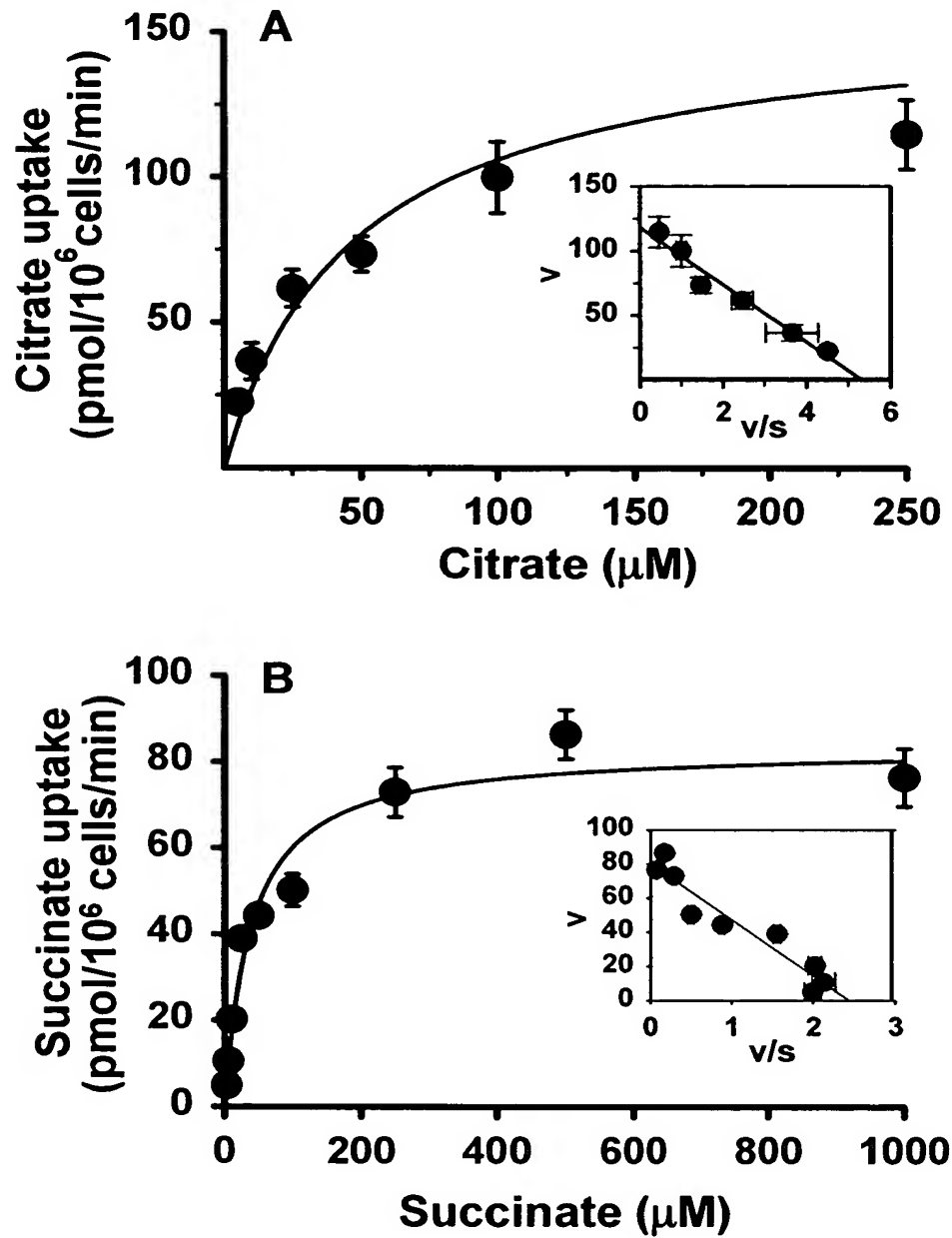


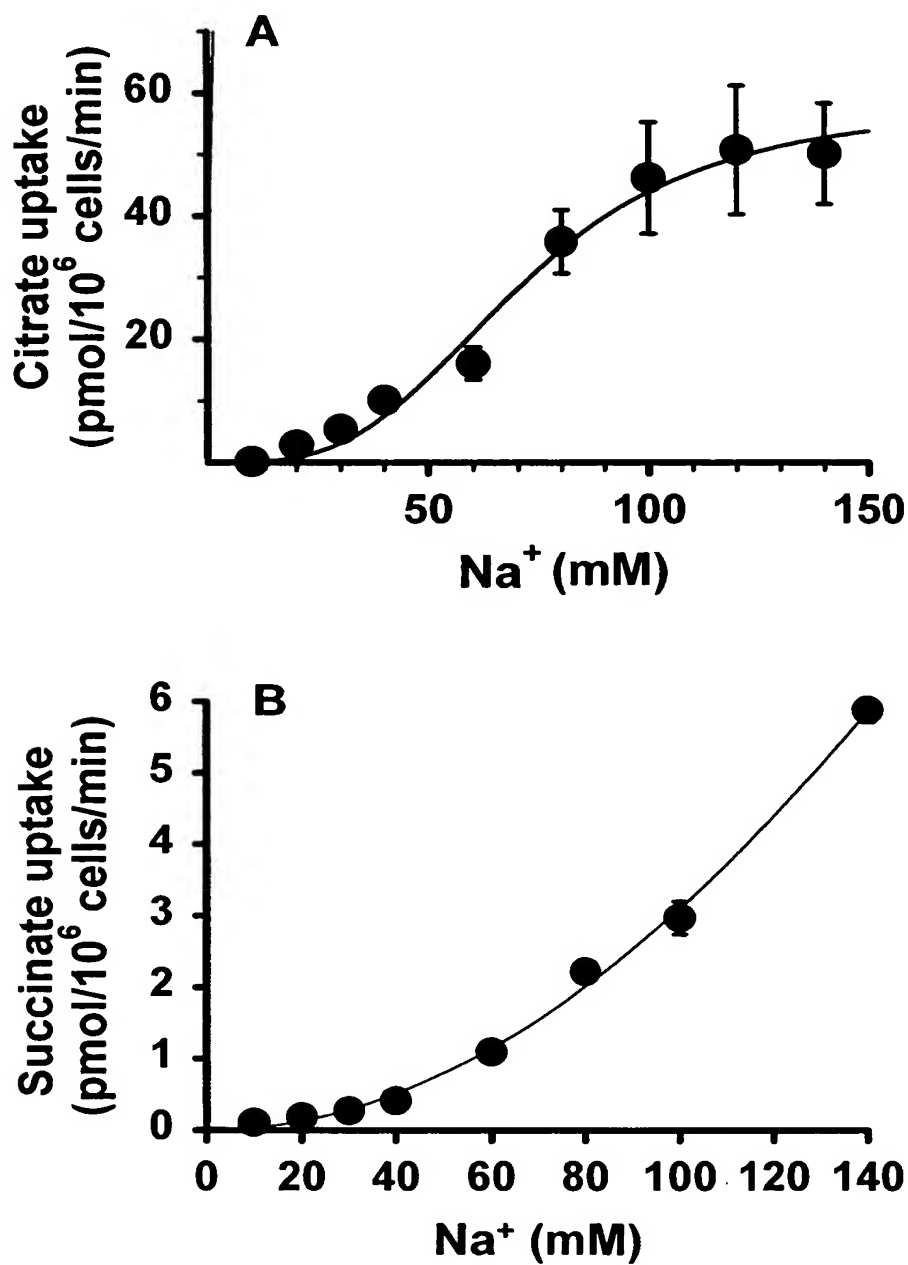
Figure 30

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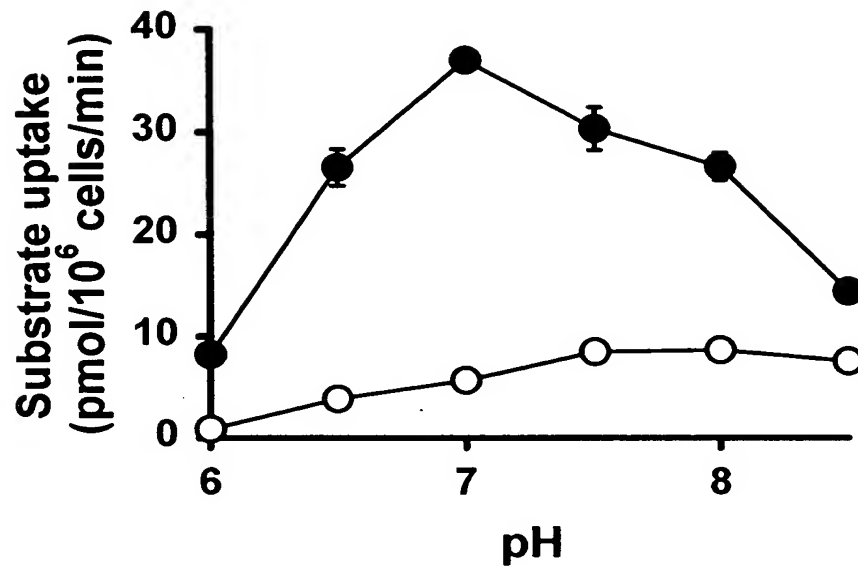
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Figure 31



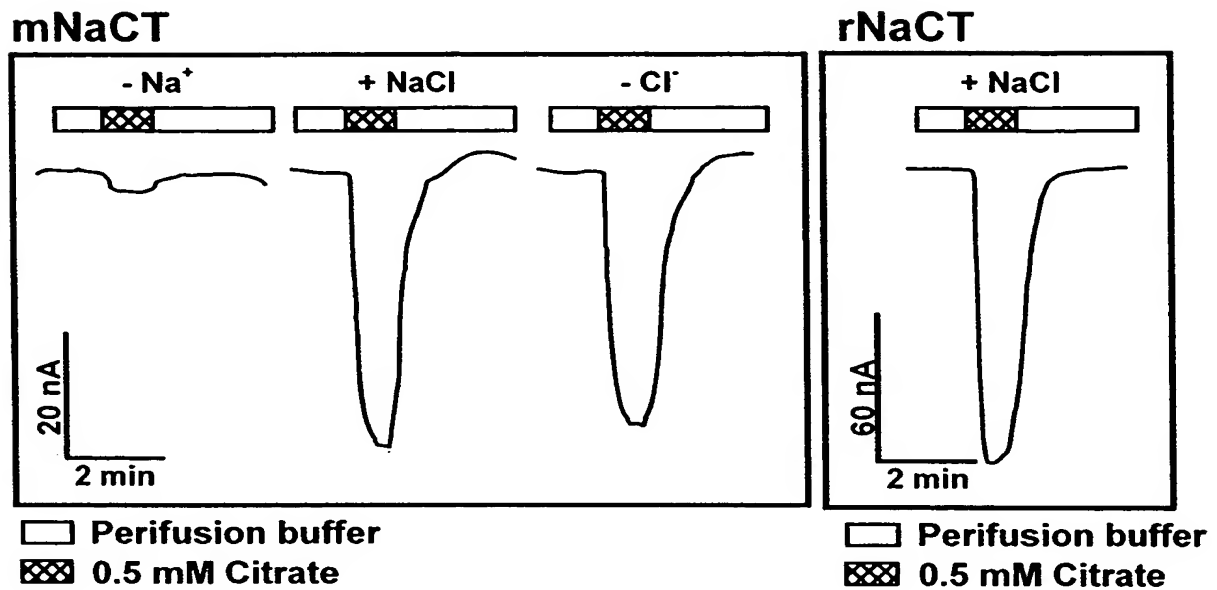
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Figure 32



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Figure 33



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Figure 34

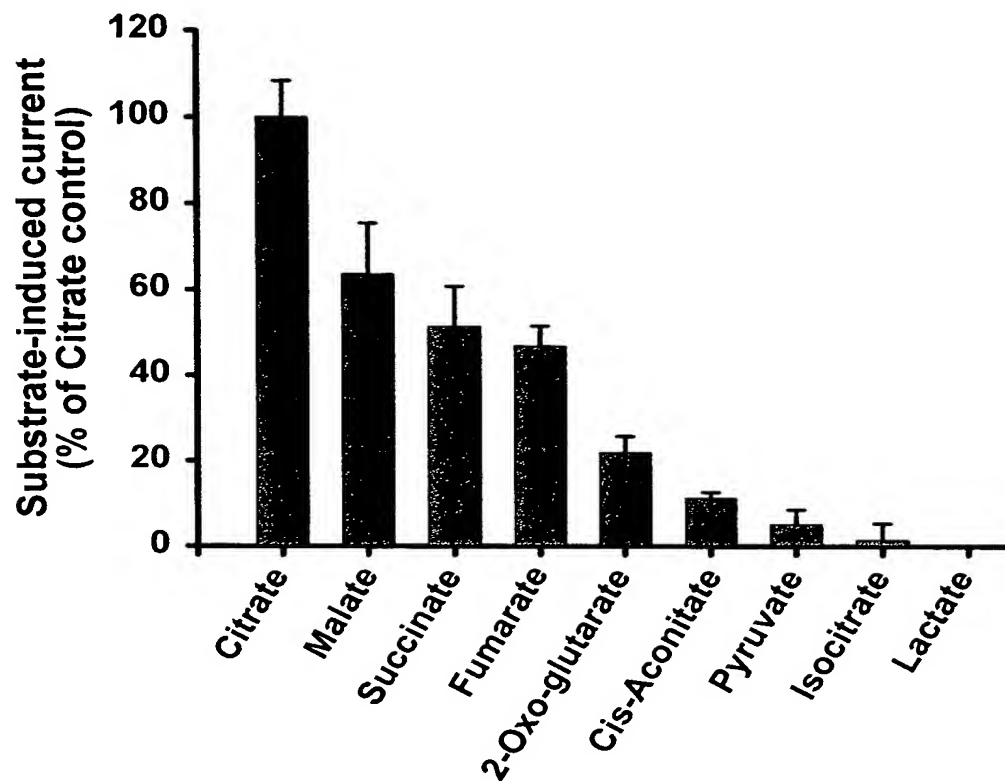
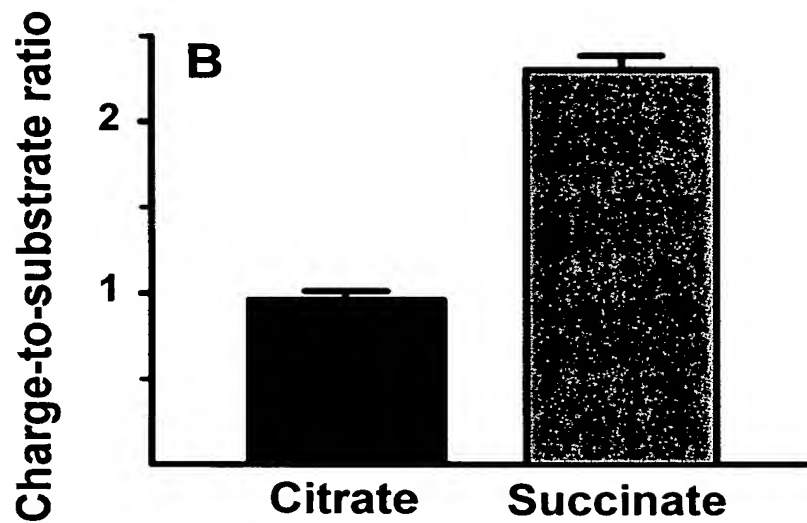
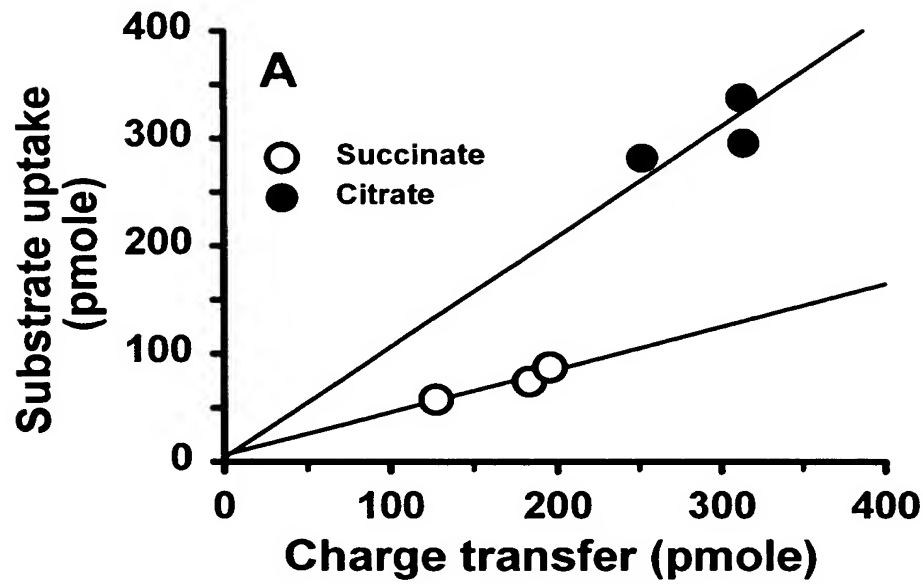


Figure 35

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Figure 36

Zebra Fish NaCT full length cDNA (1#) (1-2536 + 15 bp)

ORF: from 76 – 1824 (length = 1749) (Seq ID No: 11)

AGAGATCAGCGCACAGAAGTTTTGCGCAGTTTCTCACCGTTTGGACATTTTCATTGTAAAGTTATCCAAAGCCGAAA
TGCTGCTTCACGTGCACTCAAAC TAGTATGGAAGATGAAAAATACATTGATTCTTTTTTGGACTCCATTTCTTCT
GCTTCCTTTGCCACTTGTCATTGGATCAAAGGAGGCTGGATGTGCATATGTTGTGGTACTGATGGCAGTTTACTGG
TGTACAGAGGTGCTGCCGCTGGCTGTCAC TGCTCTCCTGCCCGCTGTGCTCTTTCCCTCTTCAGAATCATGGAGT
CCCAAGACGTATGTATGCAGTACCTTAAGGACACTAACATGCTGTTTCTGGGTGGCCTGATGGTGGCCGTGGCTGT
CGAACACTGGAATCTGCACAAGCGGATCGCCCTGCGGGTGCTGCTCCTTGTGGGGGTTTCGACCAGCTCTGTTAATG
TTGGGCTTCATGGGTGTAACAGCTTTCCTCTCCATGTGGATCAGTAACACGGCCACAACAGCCATGATGGTGGCCA
TCGTTCAGGCAGTTCTCGAGCAGCTCAACAACACAGCACAAACAAGAACAAGCTCCATACCTGAGACCGAGGAAAA
GAGCACTGAGAAACAGCCTGAGAGCCCGGTGAGGAAAAAGTGGTACTGAATGGCGACAACCTTCTCAATGGAGTCA
GACCTGAAGAACATTCAGGAGAAGCAGAGGAAAGGCTGAAGATGTCTAAAGGCCTGACCTGTGCGTGTGTTATG
CCGCCAGCATCGGCGGCACAGCCACACTCACAGGCACTGGACCAAACCTCGTTCTTATGGGACAGATGAGCCAAC
GTTCCCGGACAACCTTGACATCATTAACTTTGCGTCATGGTTTGGATTTGCCTTTCCAAACATGATCATGCTC
ACGCTGGCCTGGCTGTGGCTACAGATCGTGTCTTGGGAATAAACTTTAAAGAGACATGGGGCTGTGGGACGGTGA
AGACGGAGAAGGAGATCGCGGCCTATAATGTGATTAAAGAGGAGCACCGCAGTCTCGGCCCTATGACCTTTGGGGA
GCTGAGTGTCTTGGCCTCTTCATCTCTGGTGGTGCTTTGGTTCACTCGTGATCCAGGCTTCGTGGACGGCTGG
GCGACACGCTTCTCAATGCTGACAAAGAGTTTGTGACAGATGCCACGGTTGCAGTGTGTGTGGCTGCGCTGCTCT
TTGTCTTTCCCTCTAAACCACCAGATTGTGCTTCTGGAGAACAGAGAGTTTCGACACAGTGCCCCAGCAAGAAAG
TGGCCCCGACTCCAGCTTGTGTCATGGAAGTGACACAGAAGAAGATGCCATGGAGTATTATACTGCTGCTGGGA
GGAGGCTTTGCCCTGGCTAAGGGCAGTGAGATCTCAGGATTGTCCAAGTGGCTTGGAGATCAGATGTCTCCTCTTC
AAAGCATTCCTCCATGGGCAATAGCTATTGTTCATATGTTTAAATGATCGCAACCTTCACTGAATGCACCAGTAATGT
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GTGCCCTGTACCTCAGTGCATCTTTTGCTTCATGCTCCCTGTGGCAACTCCTCCAAACGCCATCGTCTTCTCAT
ACGGATACCTCAAAGTCTCTGACATGGCCAAGACTGGGATCGTCATGAACATCATCGGCATCCTCTCCATCACCTT
AGCCATTAACAGCTGGGGCAGAGCCATCTTCAGTTTAGACAGCTTCCCGAGCTGGGCAAACACTACTGATGCTCT
GAGACACAGAGAGCCGACTGCCCACTCACCCTTGTGAACCTCAGATTGTTTCCAGTTCTCATGTGAACAGAGA
AAACCGATTATGACCACTGTTTAGTCATTTACACATTCATGTCTATCTTTTACAAAACCGTGGTGTCTACTACAG
TCTGTGGACATTGTAACACCAATATTTGAATGATTATAAAAGACAAAAATAGATTTTACAAATCATGATTTTCT
GTAGCATTACAGCATACTGTGAGCACTGAGCATATATTTGGACCATTGGTTGTTTCGCTTTTGGCTTGTGAAAGAGC
ATTTGGACGCAGAACTCAACATCAGTCATATTGTCCCTTGTGTCCAGACTCAGAGCCAGTGGCCGGTTTCACTG
GAGATCAATACTGTACTTTGACGGTTCAAATCACTTCATGTTTCATATGCGTAATTTAAAGCTGCTTTAAACACAGC
TACACAAGAGCACATGCAGAAAAAGCTGAAAGGCTGAAATTGTGTAAATATCATCTAGATTTTAAAGCACAAAAGT
ATATTTAGAGTATATATATATATATGAATAAATTTATACATACCTCAGATATGCAGAGCTGCTTTGACAGAGTA
ATCATGTACATTTCAAATTAATTCAAACTCTATTTTAAATGTACATTTATTAATAATTATGTATTTGTTCATATT
TACTTTTTTATTTGGTTTACTC
AAAAAAAAAAAAAAAA

Amino Acid Sequence (581 aa) (Seq ID No: 12)

MASRALKLWKMKNLILFCTPFLLLPLPLVIGSKEAGCAYVVVLMVYWCTEVLPLAVTALLPAVLFPFRIMES
QDVCMQYLKDTNMLFLGGLMVAVAVEHWNLHKRIALRVLLLVGVRPALLMLGFMGVTAFLSMWISNTATTAMVPI
VQAVLEQLNNTAQEQSSI PETEEKSTEQPESPGEEKVVLNGDNFSMESDPEEHSREAEERLKM SKGLTLVCYA
ASIGGTATLTGTGPNLVLMGQMSQLFPDNPDI INFASWFGFAFPNMI IMLTLAWLWLQIVFLGINFKKTWGCYTK
TEKEIAAYNVIKEEHRSLGPMFTGELSVLALFILLVVLWFTDRDPGFVDGWATRFNADKEFVTDATVAVFVAALLF
VFPSKPPRLCFWRTEFDTVPQQESGPTPALLTWKVTQKKMPWSIILLGGGFALAKGSEISGLSKWLGDQMSPLQ
SIPWAI AIVICLMIATFTECTSNVATATLFLPILASMSQSIGVNPLYVMVPCTLSASFAMLPVATPPNAIVFSY
GYLKVSDMAKTGIVMNIIGILSITLAINSWGRAIFSLDTFPSWANTDV

Figure 37

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```
fish 1 MASRALKLWFMKNTLILECTEFLLLPLPLVIGSKPAGCAYVVVLMNAVWCTEVLPLAVI
mouse 1 -MDSAKTCVTKFKSFALLLSTPILMLPLVILIPDKFARCAYVIVIMAVYWCTDVIPVAVT
rat 1 -MASAKTYVTKFKSFVILFFAPILLLLPLIILVPPDKFARCAYVILMAIYWCTDVIPVAIT
human 1 -MASALSYVSKFKSFVILEVTPFLLLPLVILMPAKFVRCAYVILMAIYWCTEVIPLAVI

fish 61 ALLPAVLFPFLPRIMESQDVCMOYLKDTNMLFLGGLMVAVAVEHWNLHKRIALRVLLVGV
mouse 60 SLLPVLLFPFLKVLDSKQVCIOYMKDTNMLFLGSLIVAVAVERNKLHKRVLRMLLFVGT
rat 60 SLLPVLLFPFLKVLDSKQVCVOYMTDTNMLFLGSLIVATAVERNELHKRIALRMLLFVGT
human 60 SLMPVLLFPFLFQILDSRQVCVOYMKDTNMLFLGGLIVAVAVERNLHKRIALRLVLLVGA

fish 121 RPALLMLGFMGVTAFLSMWISNTATTAMMVPIVQAVLECLNNTAQOEQSSI PETTEKSTE
mouse 120 KPSRLMLGFMFVTAFLSMWISNTAATAMMIPIVEAMLOQMTAANTAVEASLGTLELLDKN
rat 120 KPSRLMLGFMFVTAFLSMWISNTATTAMMIPIVEAMLEQMVATNVAVDASQRTMELLDKN
human 120 KPARRMLGFMGVTAFLSMWISNTATTAMMVPIVEATLOQMEATSAITEAG---LELVDRG

fish 181 KQEPSPGEEKVVLNGDNFSMESDDEEHSREABERLKSKGLTLCVCYAASIGGTATLTGT
mouse 180 KISELPGSQVVF-----DPNVQEQEDEETKNMYKAMNLCVCSASIGGTATLTGT
rat 180 KASELPGSQVVF-----DPSVQKQEDEETKNMYKAMNLCVCSASIGGTATLTGT
human 177 KAKELPGSQVVF-----GETLGOQEDQERKRLKAMTLCICYAASIGGTATLTGT

fish 241 GPNVLVLMGQMSQLFPDNPDIINFASWFGFAFPNMIIIMLTLAWLWLCIVELGINPKKTWGC
mouse 231 GPNVVLLGQMQLFPDSKDVLNYSWFGFAFPNMVMMVLVAHLWLQCLYMRHNLKKTCTIC
rat 231 GPNVVLLGQMQLFPDSKDVMNFASWFAFALPNMLLMLVAHLWLLCFYMRPNLKKTCTIC
human 228 GPNVVLLGQMNELFPDSKDVLNFSWFAFAPNMVLMVLLFAHLWLQCFVYMRPNFKKSWGC

fish 301 G-TVTEKEIAAYNVIKSEHSLCEMTFGLSVLALFILLVVLWFTRDPGFVDGMAIR-F
mouse 291 CGEKKRDTEPIAYKVLNEEYOKLCSLSYFECNVLFCTILLVILWFSRDPGFMPGWLSTAW
rat 291 CCRKKKDKTEKILSKVLYEEYRKLGPLSYAECNVLFCTGLLILWFSRDPGFMPGWLSTAW
human 288 GLESKK-NEKAALKVLOEYRKLGPLSFAEINVLICFFLLVILWFSRDPGFMPGWLTVAW

fish 359 FNADKEFVTDATVAIFVAALLFVFPSPKPERLCFWRTESFETVPQOESGPTPALITWKVTC
mouse 351 VEGNTVHTIDATVAIFVAILLFIIPSQKPKFNFSQTEEBERH---TPFYPPALLDWKVTG
rat 351 IEGNTKHVTDATVAIFVAILLFIVPSQKPKFNFSRQTEEBERH---TPFYPPPLLNWKVTC
human 347 VEGETHYVSDATVAIFVATLLFIVPSQKPKFNFSRQTEEBERH---TPFYPPPLLDWKVTC

fish 419 KAMPWSIILLGGGFALAKGSEISGLSKNLGDDSPLOSIPFWAIAIVICLMIATFTECT
mouse 408 EKVPNDIVLLGGGFAMAKGCTSGLSKNWAAQMEPLRLKPAVITLILSCLVAMTTECT
rat 408 EKVPWGIIVLLGGGFAMAKGCTSGLSKNWAAQMEPLSSVRPAITLILSCIVAMTTECT
human 404 EKVPWGIIVLLGGGFALAKGSEASGLSVWKGQMEPLHAVPPAAITLILSLLVAVFTECT

fish 479 SNVATATLFLPILASMSQSIGVNPPLYVMVPCTLSASFAPMLPVATPPNAIVFSYGLKVS
mouse 468 SNVATTTLFLPIFASARSIGIHPLYVMIPCTMSASLAFMLPVATPPNAIVFAYGHLRVV
rat 468 SNVATTTLFLPIFASARSIGIHPLYVMIPCTLSASLAFMLPVATPPNAIVFAYGHLKVI
human 464 SNVATTTLFLPIFASARSIGINPLYVMIPCTLSASFAPMLPVATPPNAIVFTYGLKVA

fish 539 DMAKTGIVMNIIGILSIITLAINSWGRAIFSLTEFPSSWANTEDV--
mouse 528 DMKKTGLIMNFVGLSVFLSVNTWGRAMFNLENFPDWANSTSVNT
rat 528 DMVKTGLVMNIGIASVFLSVNTWGRAVENLDKFPDWANLTHINT
human 524 DMVKTGIVMNIIGVFCVFLAVNTWGRAIFDLDHFPDWANVTHIBT
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Figure 38

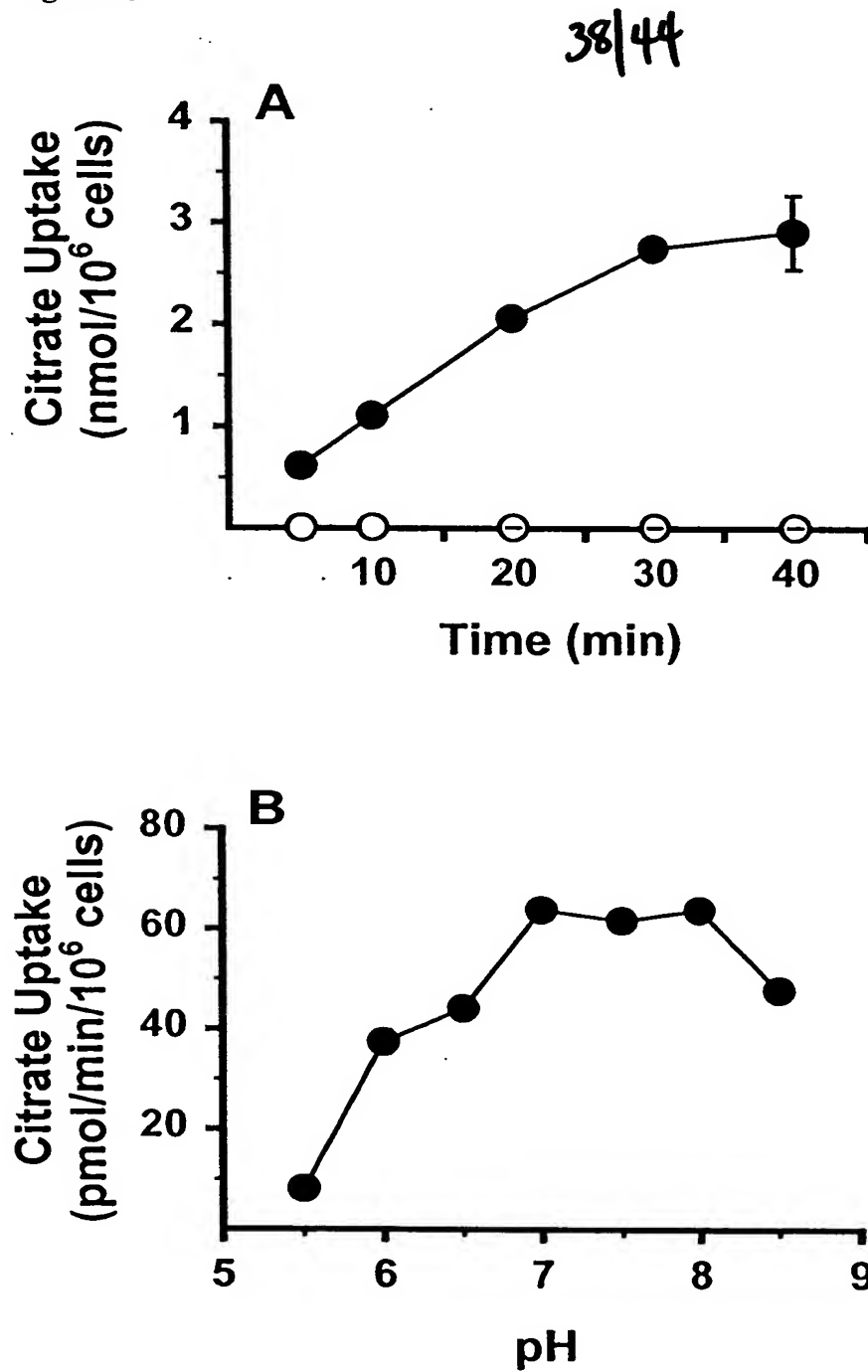
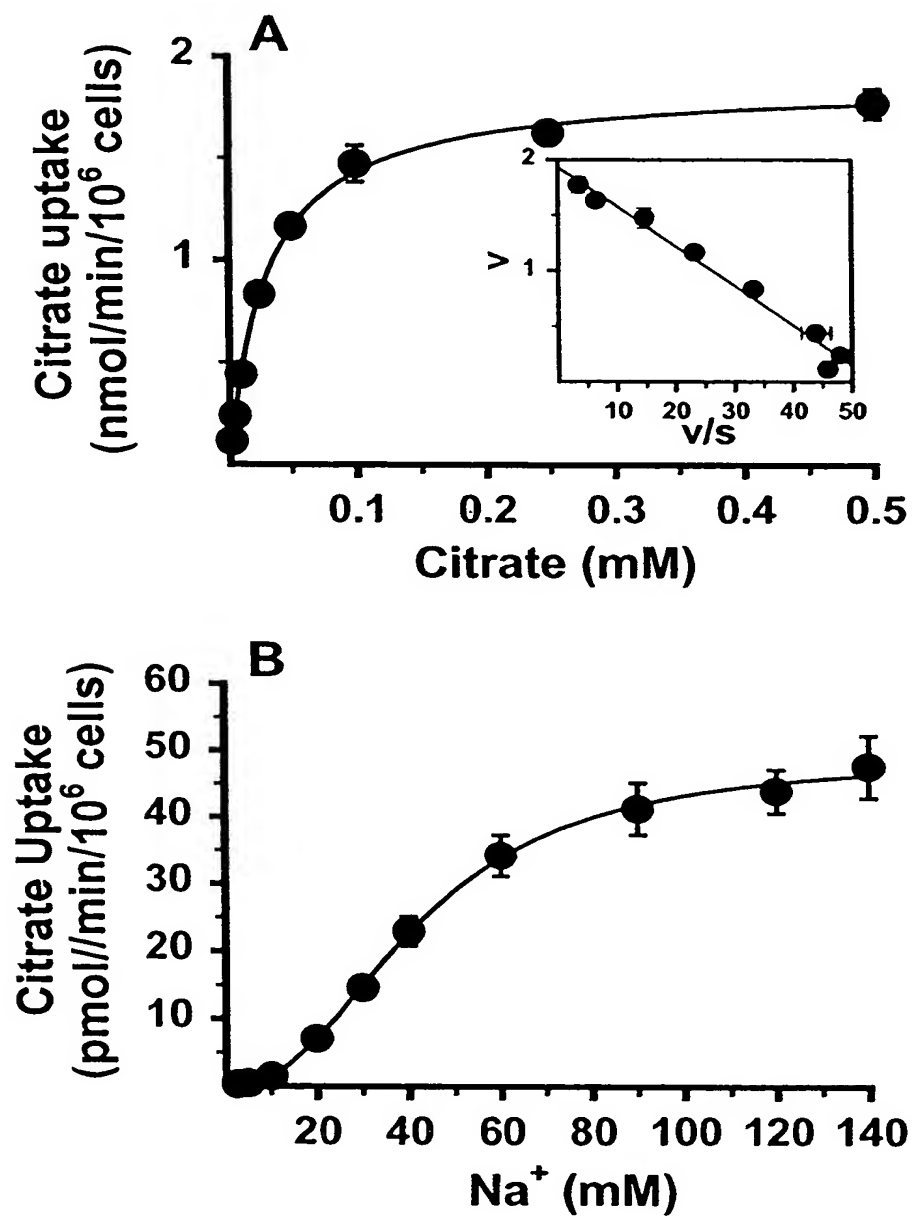


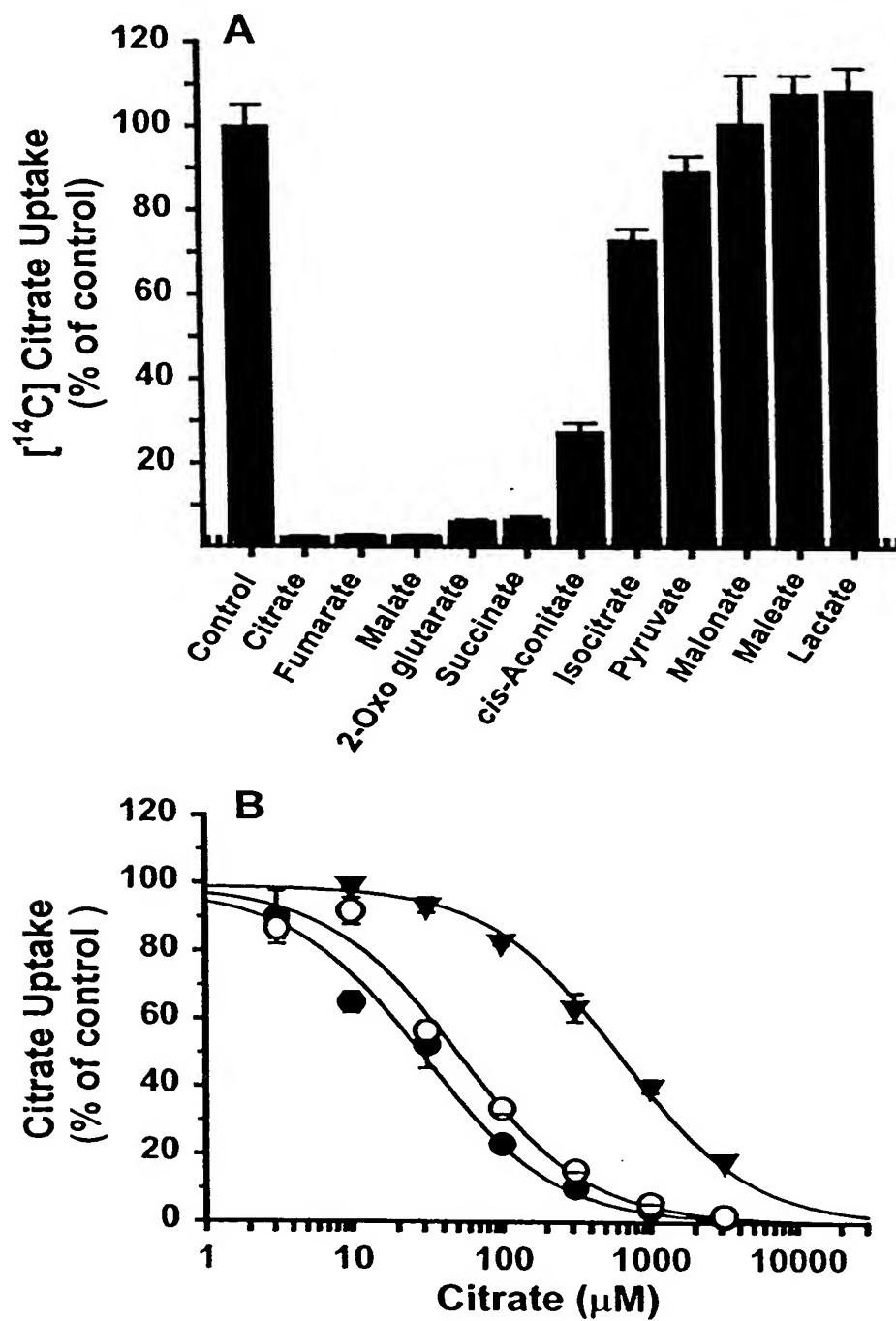
Figure 39

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Figure 40



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Figure 41

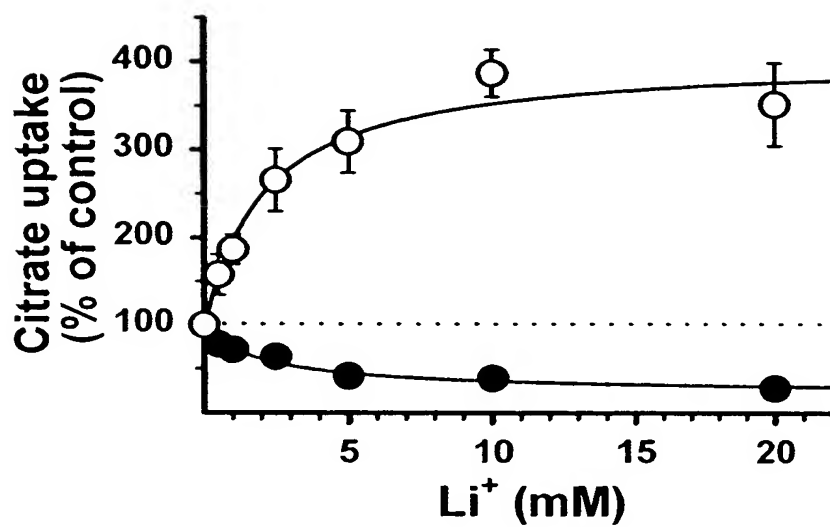
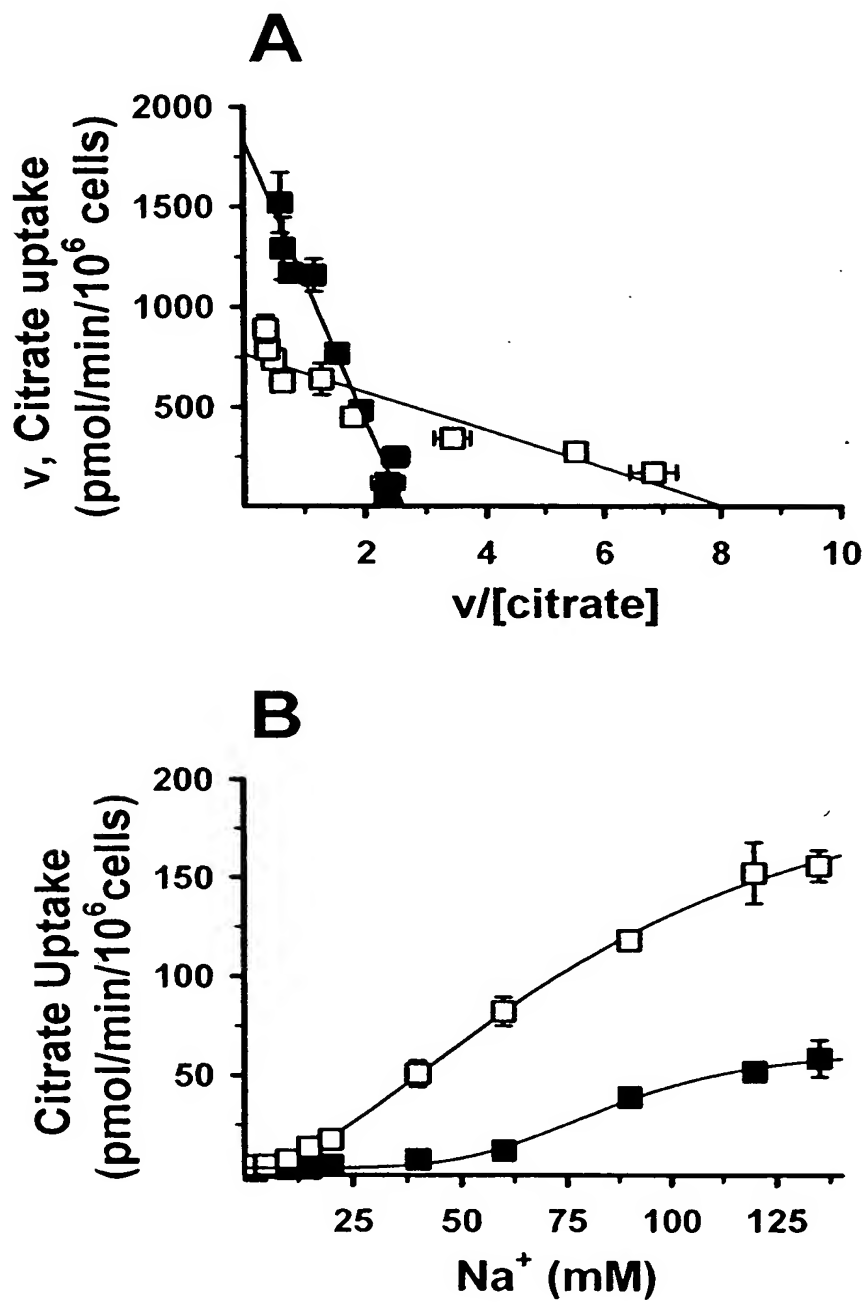


Figure 42

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Figure 43

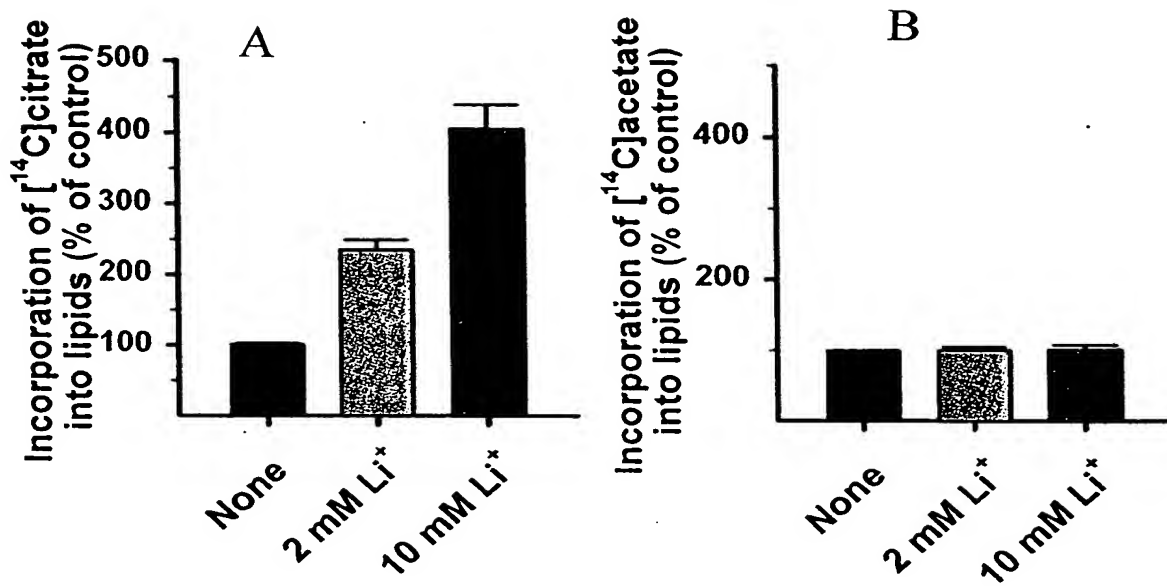


Figure 44

